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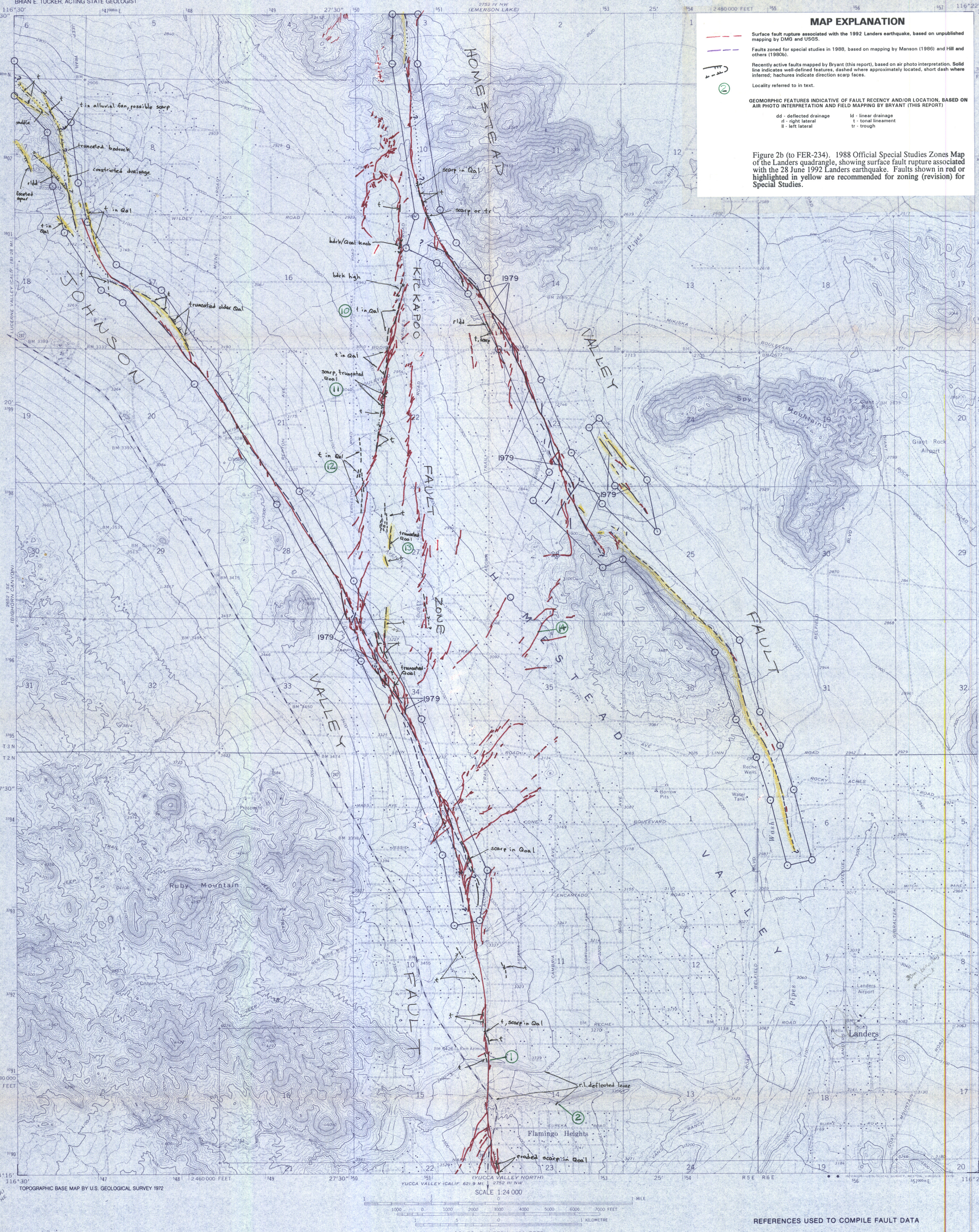
LANDERS QUADRANGLE
CALIFORNIA—SAN BERNARDINO CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
SW/4 EMERSON LAKE 15' QUADRANGLE



MAP EXPLANATION

Surface fault rupture associated with the 1992 Landers earthquake, based on unpublished mapping by DMG and USGS.

Faults zoned for special studies in 1988, based on mapping by Manson (1986) and Hill and others (1980b).

Recently active faults mapped by Bryant (this report), based on air photo interpretation. Solid line indicates well-defined features, dashed where approximately located, short dash where inferred; hachures indicate direction scarp faces.

Locality referred to in text.

GEOMORPHIC FEATURES INDICATIVE OF FAULT RECENCY AND/OR LOCATION, BASED ON AIR PHOTO INTERPRETATION AND FIELD MAPPING BY BRYANT (THIS REPORT)

dd - deflected drainage
rl - right lateral
ll - left lateral
ld - linear drainage
t - tonal lineament
tr - trough

Figure 2b (to FER-234). 1988 Official Special Studies Zones Map of the Landers quadrangle, showing surface fault rupture associated with the 28 June 1992 Landers earthquake. Faults shown in red or highlighted in yellow are recommended for zoning (revision) for Special Studies.

MAP EXPLANATION

Potentially Active Faults

1906 C

Faults considered to have been active during Holocene time and to have a relatively high potential for surface rupture; solid line where accurately located, long dash where approximately located, short dash where inferred, dotted where concealed; query (?) indicates additional uncertainty. Evidence of historic offset indicated by year of earthquake-associated event or C for displacement caused by creep or possible creep.

Special Studies Zone Boundaries

These are delineated as straight-line segments that connect encircled turning points so as to define special studies zone segments.

Seaward projection of zone boundary.

STATE OF CALIFORNIA
SPECIAL STUDIES ZONES

Delineated in compliance with
Chapter 7.5, Division 2 of the California Public Resources Code
(Alquist-Priolo Special Studies Zones Act)

LANDERS QUADRANGLE

OFFICIAL MAP

Effective: March 1, 1988

Brian E. Tucker
Acting State Geologist

REFERENCES USED TO COMPILE FAULT DATA

Landers Quadrangle

Dibblee, T.W., Jr., 1967, Geologic map of the Emerson Lake quadrangle, San Bernardino County, California: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-490, 4p., 1 plate, scale 1:62,500.

Hill, R.L., Pechmann, J.C., Treiman, J.A., McMillan, J.R., Given, J.W., and Ebel, J.E., 1980, Geologic study of the Homestead Valley earthquake swarm of March 15, 1979: California Geology, v. 33, no. 3, p. 60-67.

Hill, R.L., Treiman, J.A., McMillan, J.R., Pechman, J.C., Corbett, E.J., Ebel, J.E., Given, J.W., Hutton, L.K., and Allen, C.R., 1980, unpublished map of surface faulting resulting from the Homestead Valley earthquakes of 15 March 1979, scale 1:24,000.

Manson, M.W., 1986, Homestead Valley fault, Johnson Valley fault, and associated faults, San Bernardino County, California: California Division of Mines and Geology Fault Evaluation Report FER-180 (unpublished).

For additional information on faults in this map area, the rationale used for zoning, and additional references consulted, refer to unpublished Fault Evaluation Reports on file at regional offices of DMG.

IMPORTANT – PLEASE NOTE

1) *This map may not show all faults that have the potential for surface fault rupture, either within the special studies zones or outside their boundaries.*
2) Faults shown are the basis for establishing the boundaries of the special studies zones.
3) The identification and location of these faults are based on the best available data. However, the quality of data used is varied. Traces have been drawn as accurately as possible at this map scale.
4) Fault information on this map is not sufficent to serve as a substitute for the geologic site investigations (special studies) required under Chapter 7.5 of Division 2 of the California Public Resources Code.

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